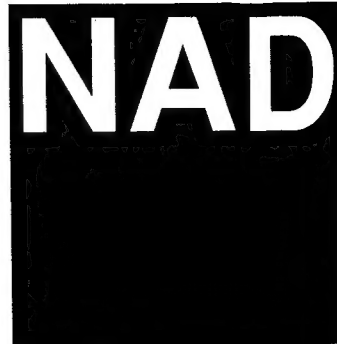


# SERVICE MANUAL

**106/1000S**  
**PREAMPLIFIER**

**106/1000S**  
**PREAMPLIFIER**



84

# CONTENTS

| DESCRIPTION                       | PAGE  |
|-----------------------------------|-------|
| SPECIFICATIONS.....               | 3     |
| REAR PANEL /FRONT PANEL VIEW..... | 4     |
| BLOCK DIAGRAM.....                | 5     |
| WIRING DIAGRAM.....               | 6     |
| DISASSEMBLY INSTRUCTIONS.....     | 7     |
| TROUBLE SHOOTING GUIDE.....       | 8     |
| SCHEMATIC DIAGRAM.....            | 9-10  |
| PCB LAYOUT (PARTS SIDE).....      | 11-12 |
| EXPLODED VIEW.....                | 13    |
| EXPLODED VIEW PARTS LIST.....     | 14    |
| PARTS LIST.....                   | 15-17 |
| PACKING DIAGRAM.....              | 18    |
| NOTES.....                        | 19    |

# SPECIFICATIONS

Measured in accordance with EIA Standard RS-490 (IHF T-202).

## PHONO INPUT

|                                       |                 |                     |
|---------------------------------------|-----------------|---------------------|
| Input impedance (R and C)             | MM and MC:..... | 47K ohm + 200pF     |
| Input sensitivity ref. 0.5V 1KHz      | MM:.....        | 1.5mV               |
| ref. 0.5V,                            | MC:.....        | 0.1mV               |
| Input overload                        | MM:.....        | 20mV/200mV/1700mV   |
| at 20Hz/1KHz/20KHz                    | MC:.....        | 1.3mV/13mV/110mV    |
| Signal/Noise ratio                    | MM:.....        | 76dB ref. 5mV       |
| (A-weighted with cartridge connected) | MC:.....        | 76dB ref. 0.5mV     |
| THD (20Hz-20KHz) and IM dist.....     |                 | <0.02%              |
| RIAA accuracy                         | MM:.....        | +/-0.2dB 20Hz-20KHz |
|                                       | MC:.....        | +/-0.2dB 50Hz-20KHz |
|                                       |                 | -0.5dB at 20Hz      |

## LINE LEVEL INPUTS (CD, Video, Tuner, Tape1, Tape2)

|  |                 |
|--|-----------------|
| Input impedance (R and C).....                           | 20K ohm + 450pF |
| Input sensitivity ref. 0.5V.....                         | 80mV            |
| Maximum input signal.....                                | >10V            |
| Signal/Noise ratio, A-weighted.....                      | 98dB ref. 0.5V  |
| Frequency response (20Hz-20KHz in tone defeat mode)..... | +/-0.2dB        |
| THD.....   | 0.01%           |

## LINE LEVEL OUTPUTS

|                      |              |                    |
|----------------------|--------------|--------------------|
| Output impedance     | Pre-amp..... | 220 ohms           |
|                      | XLR.....     | 220 ohms           |
|                      | Tape.....    | Source Z + 2K ohms |
|                      | Phones.....  | 120 ohms           |
| Maximum output level | Pre-amp..... | >12V               |
|                      | XLR.....     | >12V               |
|                      | Tape.....    | >10V               |
|                      | Phones.....  | >8V into 600 ohms  |
|                      |              | >250mV into 8 ohms |

## CONTROLS

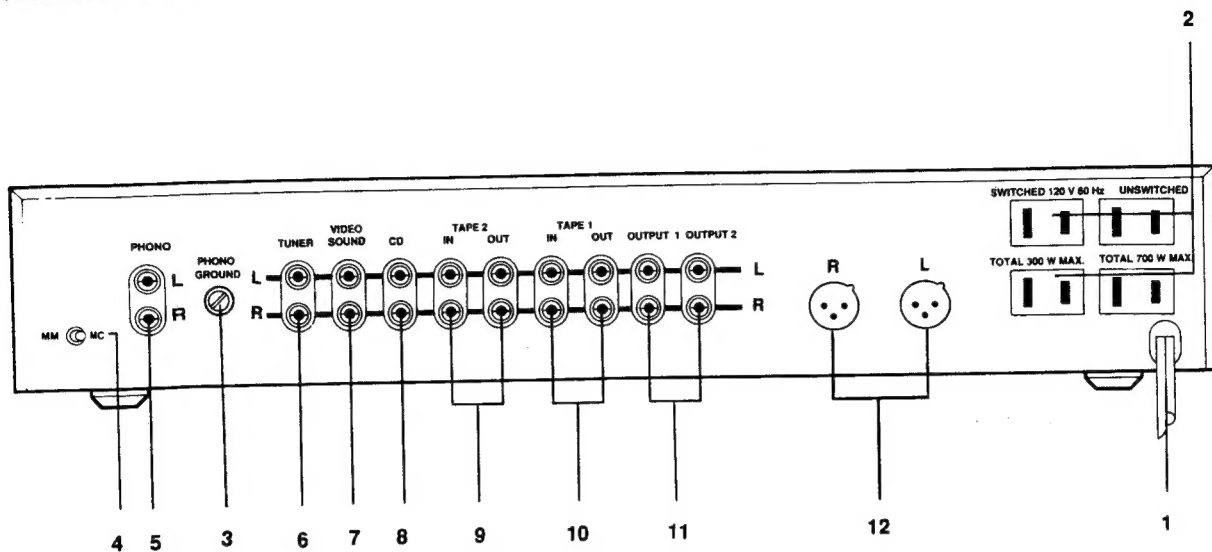
|             |                 |
|-------------|-----------------|
| Treble..... | +/-7dB at 10KHz |
| Bass.....   | +/-10dB at 50Hz |

## PHYSICAL SPECIFICATIONS

|                             |                                     |
|-----------------------------|-------------------------------------|
| Dimensions (W x D x H)..... | 435 x 263 x 81mm                    |
| Net Weight.....             | 3.7Kg (8 lb 1 oz.)                  |
| Shipping Weight.....        | 4.4Kg (9 lb 11 oz.)                 |
| Power Consumption.....      | 17W at 120, 220, or 240 VAC 50/60Hz |

# REAR PANEL /FRONT PANEL VIEW

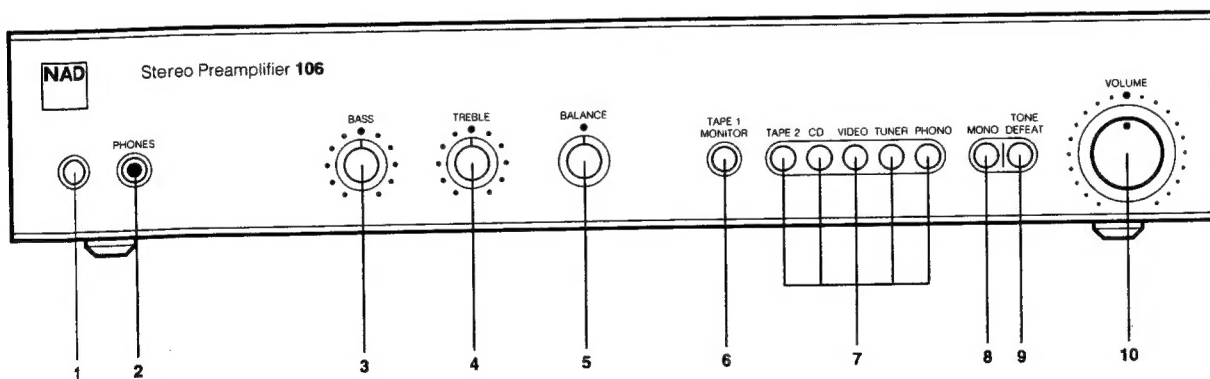
## REAR PANEL



1. AC LINE CORD
2. AC CONVENIENCE OUTLETS  
(120V model only)
3. PHONO GROUND
4. MM/MC SELECTOR
5. PHONO INPUT
6. TUNER INPUT

7. VIDEO SOUND INPUT
8. CD INPUT
9. TAPE 2 INPUT/OUTPUT
10. TAPE 1 INPUT/OUTPUT
11. PREAMP OUTPUTS
12. XLR OUTPUTS

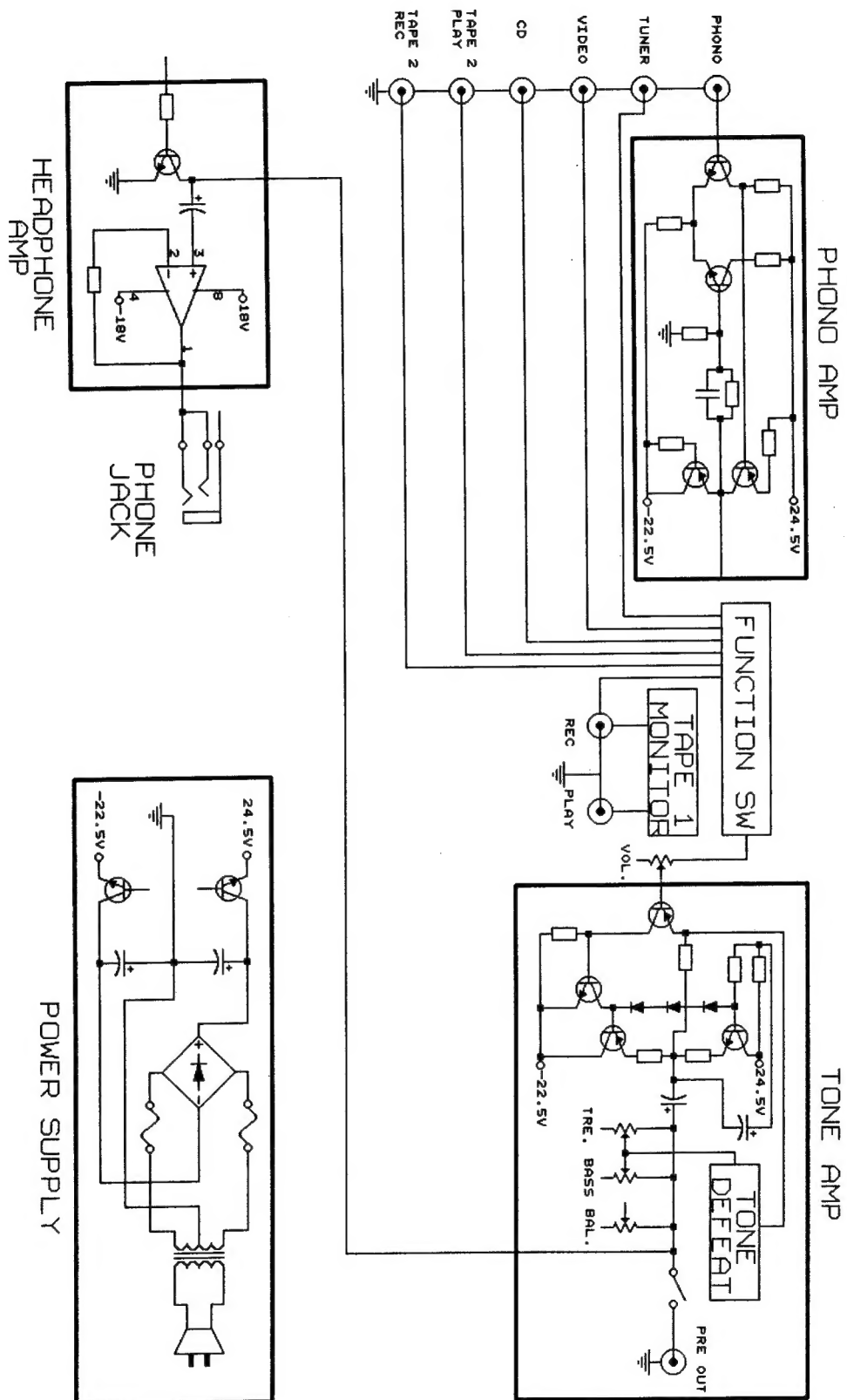
## FRONT PANEL



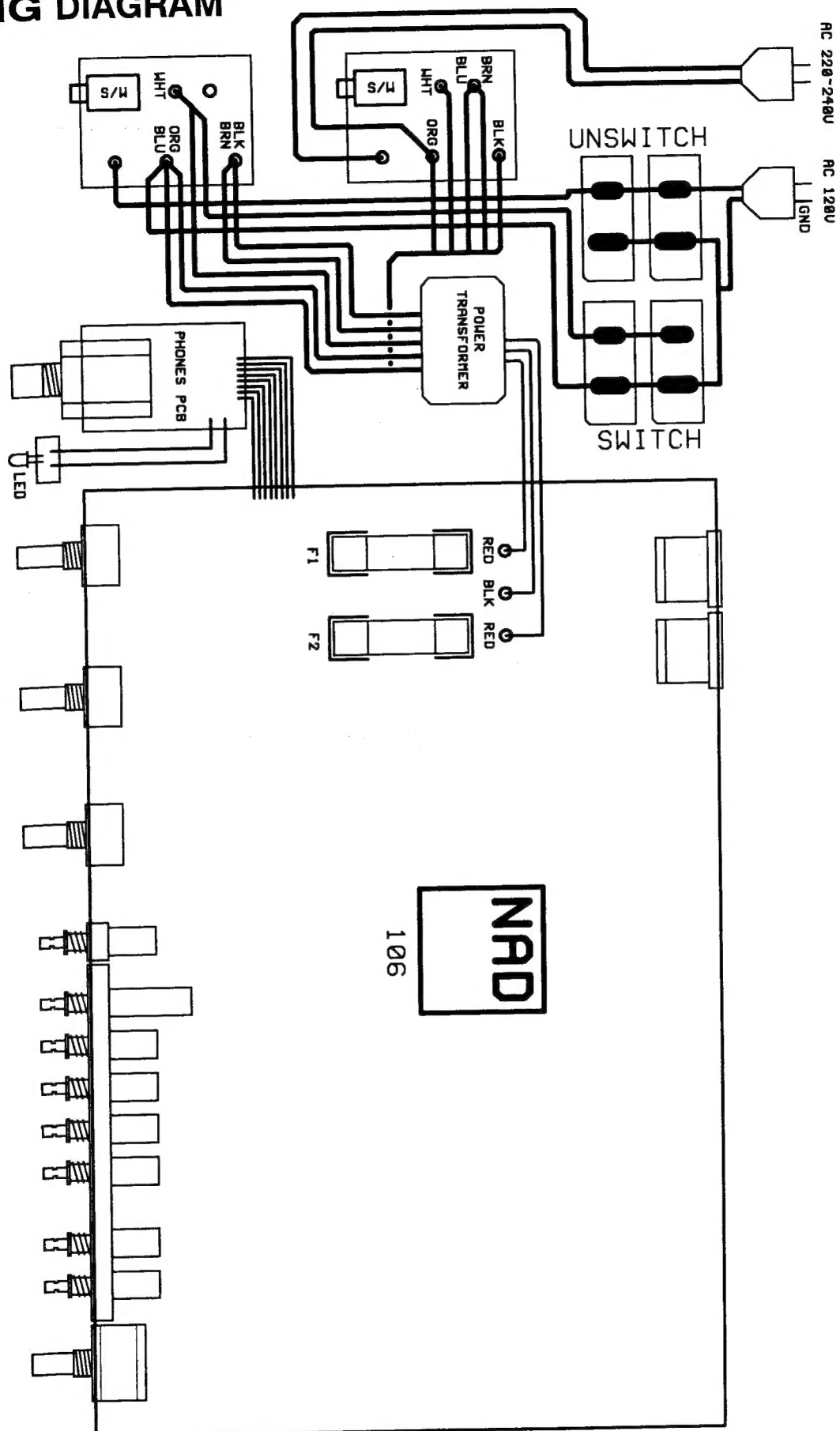
1. POWER
2. PHONES
3. BASS
4. TREBLE
5. BALANCE
6. TAPE 1 MONITOR

7. INPUT SELECTOR (TAPE 2, CD, VIDEO  
SOUND, TUNER, PHONO.)
8. MONO
9. TONE DEFEAT
10. VOLUME

# BLOCK DIAGRAM



# WIRING DIAGRAM



# DISASSEMBLY INSTRUCTIONS

## TOP COVER REMOVAL

1. Remove parts in order of disassembly as numbered.  
a. ① - ④ Machine screws M 4.0x6.0 (See Fig. 1.)  
from the side panels.

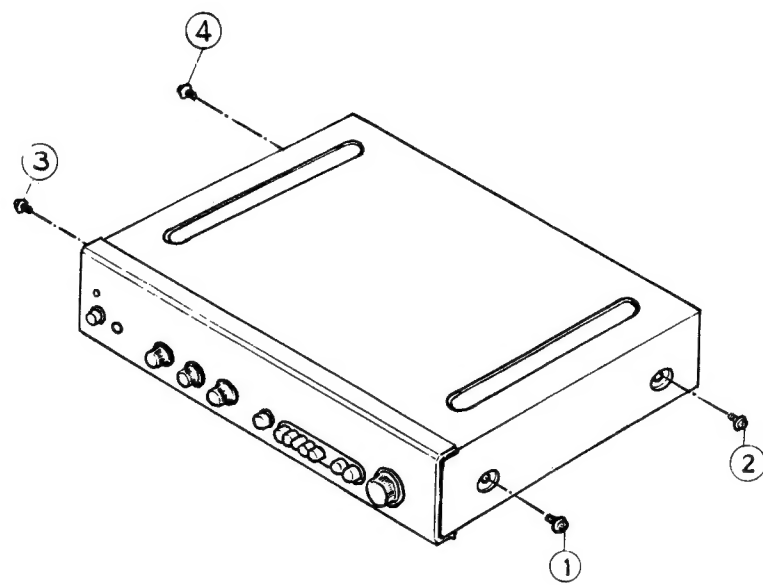


Fig. 1.

2. Pull both sides of TOP COVER outward and then remove in the direction as indicated by pointer ⑤ (See Fig. 2.)

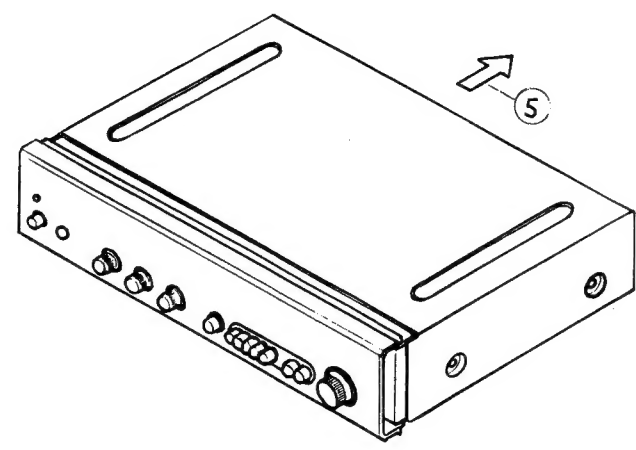
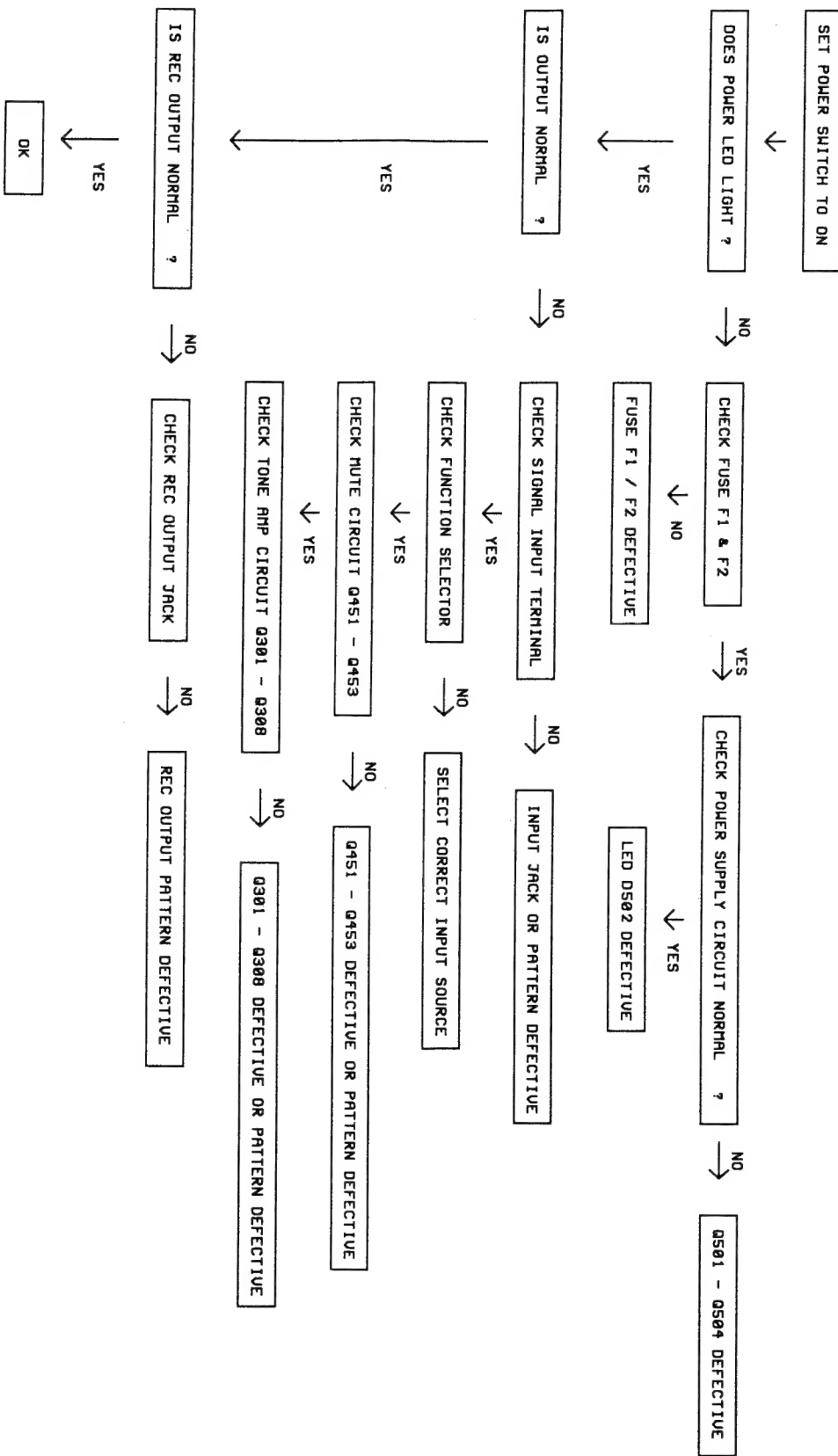
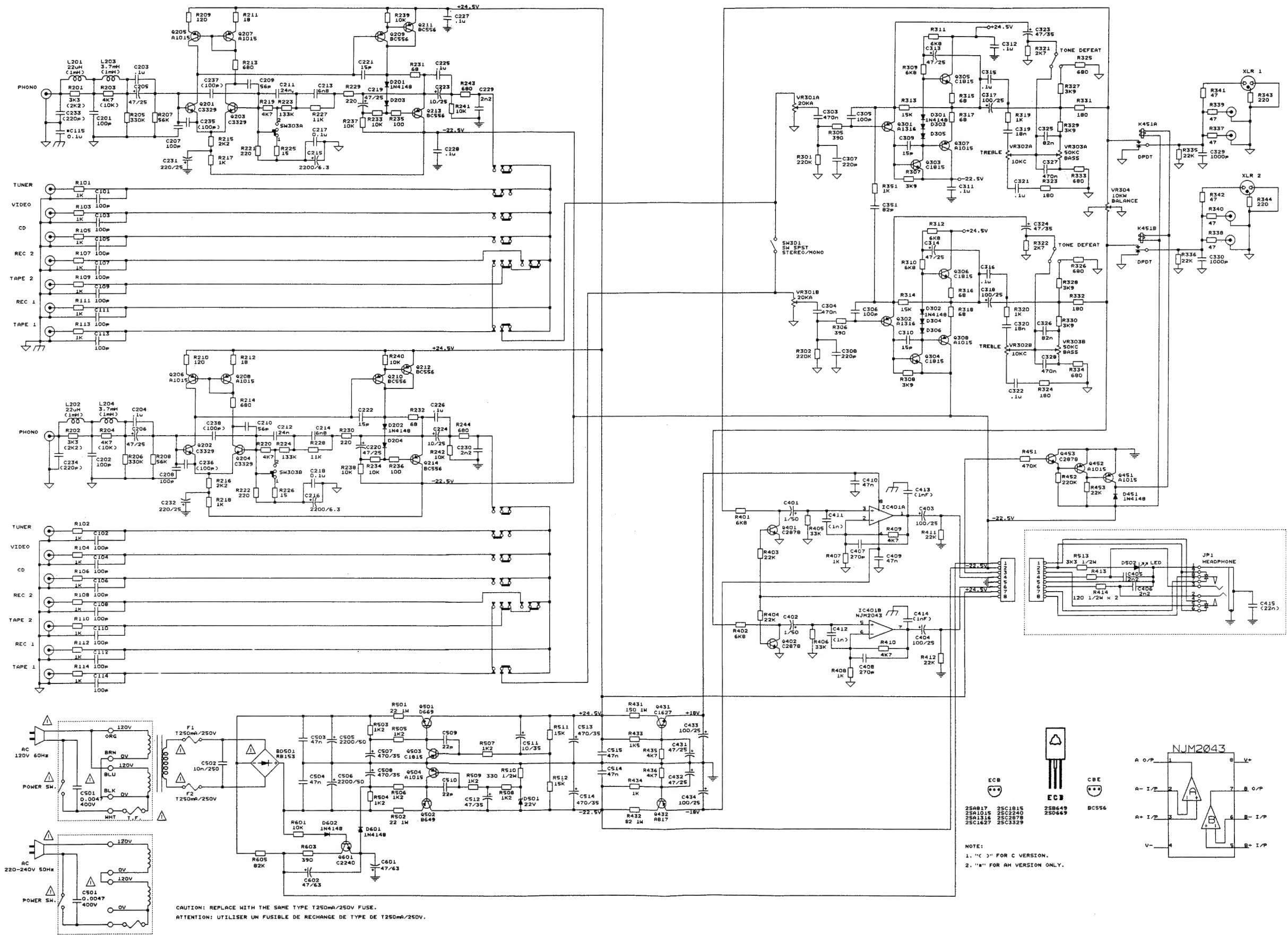


Fig. 2.

# TROUBLE SHOOTING GUIDE

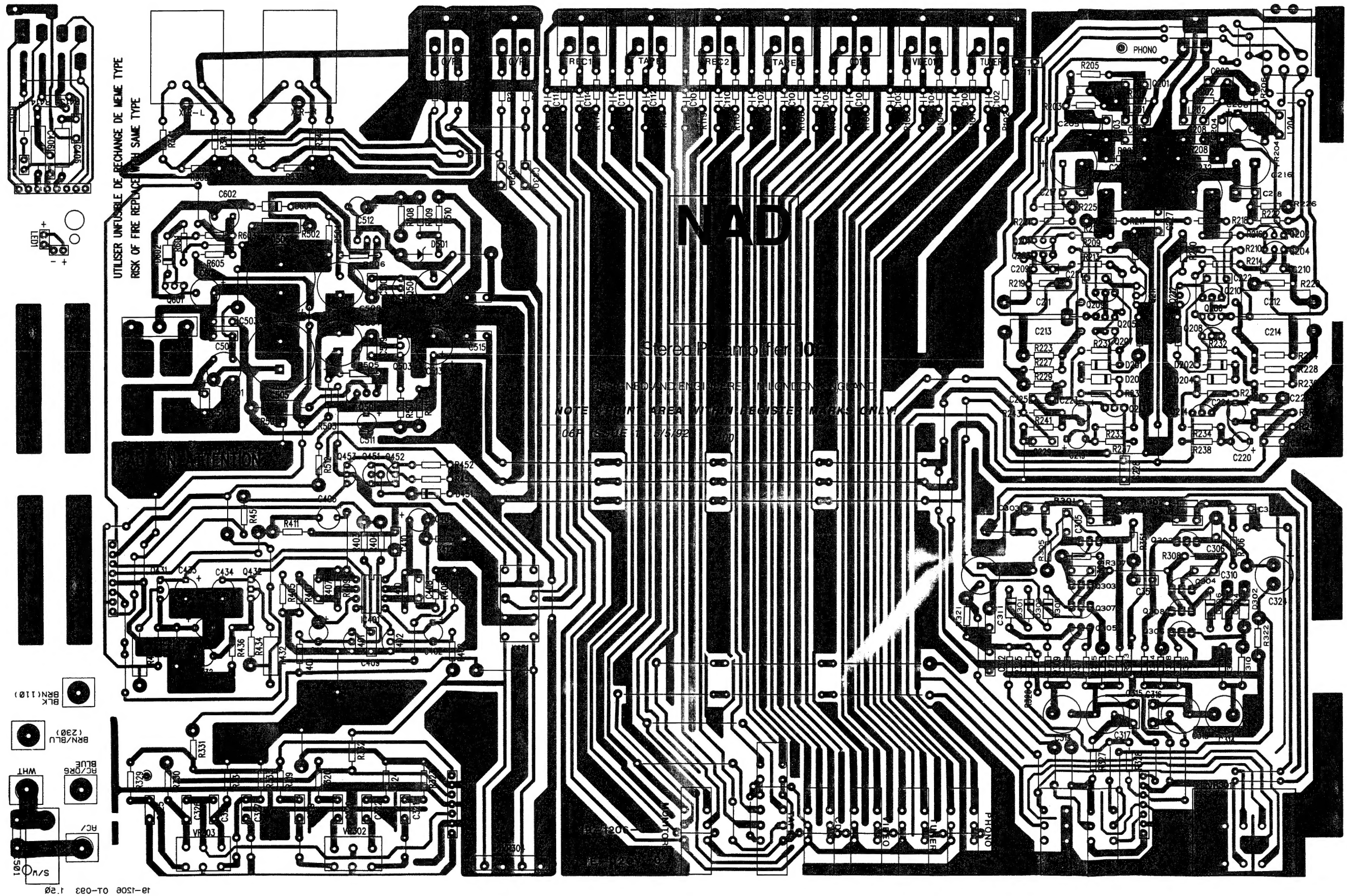


SCHEMATIC DIAGRAM

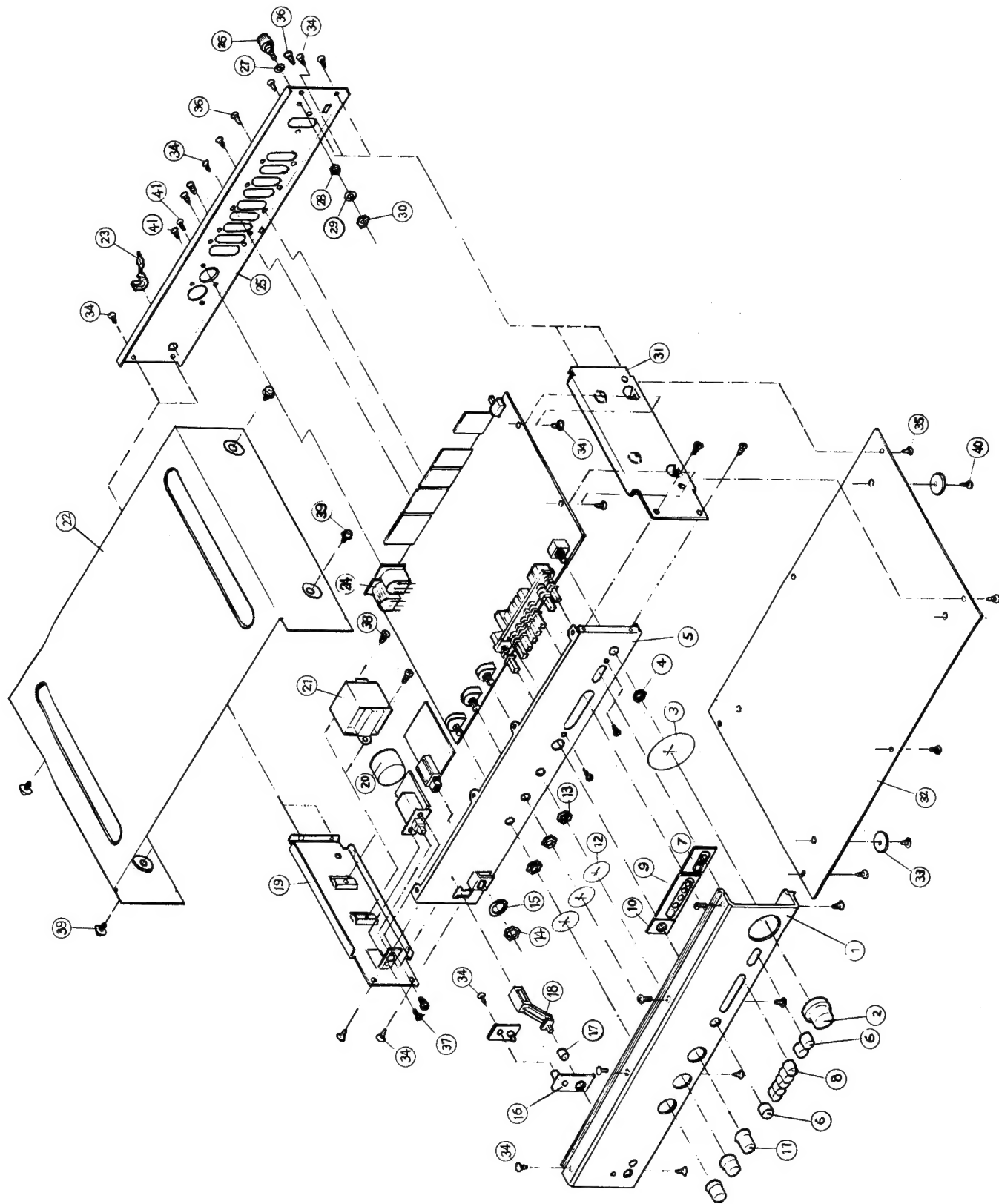




## PCB LAYOUT (PARTS SIDE)



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

| ITEM          | PART NO.    | DESCRIPTION                            | Q'TY |
|---------------|-------------|--|------|
| 1-A           | 11-8377-2   | FRONT PANEL NAD-106                    | 1    |
| 1-B           | 11-8377-1   | FRONT PANEL NAD-1000S                  | 1    |
| 2             | 12-3113     | KNOB VOLUME                            | 1    |
| 3             | 12-9003     | FELT RING 50 x 0.5mm                   | 1    |
| 4             | 29-4162-N   | NUT, POT                               | 1    |
| 5             | 11-6116     | FRONT CHASSIS                          | 1    |
| 6             | 12-3110     | BUTTON BLACK MONO,TONE DEF, MONITOR    | 3    |
| 7             | 13-8221-3   | BEZEL 2 HOLE                           | 1    |
| 8             | 12-3110     | BUTTON BLACK                           | 5    |
| 9             | 13-8224     | BEZEL 5 HOLE                           | 1    |
| 10            | 13-8221-2   | BEZEL 1 HOLE                           | 1    |
| 11            | 12-3129     | KNOB BASS,TREBLE,BALANCE               | 3    |
| 12            | 12-9002     | FELT RING 30 x 0.5mm                   | 3    |
| 13            | 29-4141-N   | NUT, POTS                              | 3    |
| 14            | 12-2128G-1  | NUT, PHONES                            | 1    |
| 15            | 12-2128G-2  | WASHER, PHONES                         | 1    |
| 16            | 13-8221-1   | BEZEL POWER                            | 1    |
| 17            | 12-3148     | BUTTON GREEN                           | 1    |
| 18            | 12-1083     | POWER LINK                             | 1    |
| 19            | 11-6117     | FRAME L                                | 1    |
| 20            | 12-7103     | TUBE/SVGS-UL                           | 1    |
| 21            | 29-2132     | TRANSFORMER                            | 1    |
| 22            | 50-1034     | TOP COVER                              | 1    |
| 23            | 14-5003     | BUSHINGS                               | 1    |
| 24            | 12-1000S    | XLR MALE CHASSIS                       | 2    |
| 25-A*US/CN    | 11-8378-7   | REAR PANEL US CN/120V NAD-106          | 1    |
| 25-A*WG/EU/SA | 11-8378-8   | REAR PANEL WG,EU,SA/220-240V NAD-106   | 1    |
| 25-B*US/CN    | 11-8378-4   | REAR PANEL US CN/120V NAD-1000S        | 1    |
| 25-B*WG/EU/SA | 11-8378-5   | REAR PANEL WG,EU,SA/220-240V NAD-1000S | 1    |
| 26-1          | 15-2037     | GND BOLT                               | 1    |
| 26-2          | 15-2037-1   | GND NUT                                | 1    |
| 27            | 15-2037-3   | STOP WASHER                            | 1    |
| 28            | 15-2037-5   | GEAR WASHER                            | 1    |
| 29            | 15-2037-4   | CONNECT WASHER                         | 1    |
| 30            | 15-2037-2   | BOLT NUT M3.5                          | 1    |
| 31            | 11-6118     | FRAME R                                | 1    |
| 32            | 11-6119     | COVER BOTTOM                           | 1    |
| 33            | 28-1044     | A562 RUBBER-FOOT                       | 4    |
| 34            | S2B03+I06SL | TAPPING SCREW T3x6 BLK                 | 21   |
| 35            | S2B03+I06SZ | TAPPING SCREW T3x6 COLOR               | 6    |
| 36            | S6B03+I08SL | TAPPING SCREW T3x8 BLACK               | 5    |
| 37            | S1B03+I06SL | MACHINE SCREW M3x6 BLK                 | 4    |
| 38            | S1K04+I06SL | TAPPING SCREW T4x6 W/W BLK             | 2    |
| 39            | S1K04+I06SL | TAPPING SCREW T4x6 W/W BLK             | 4    |
| 40            | S1B04+I08SL | MACHINE SCREW M4x8 BLK                 | 4    |
| 41            | S1B03+I08SL | MACHINE SCREW M3x8 BLK                 | 4    |

# PARTS LIST

## NAD-106 PARTS LIST

| LOCATION                          | REF. NO.      | PARTS NO.     | DESCRIPTION                   | Q'TY |
|-----------------------------------|---------------|---------------|-------------------------------|------|
| SELECT-CKT                        |               | (19-1206-1)   | NAD-106                       | 1    |
| 1000S PCB                         |               | (19-1206)     | FR4                           | 1    |
| TU, TV, TA2(O), TA1(I)            | 12-2092G      | 12-2092G      | RCA JACK, 4P/G GOLD PLATE     | 3    |
| TA1(O), O/P(1,2)                  | 12-2093G      | 12-2093G      | RCA JACK, 6P/G GOLD PLATE     | 1    |
| RESISTORS                         |               |               |                               |      |
| R101-R114                         | 16-1/4MA102F  | 16-1/4MA102F  | RES. M.F., 1K, 1/4W, +/-1%    | 14   |
| CAPACITORS                        |               |               |                               |      |
| C115 * AH                         | 17-5DR104M    | 17-5DR104M    | CAP. M.CER. 0.1uF/50V, +/-20% | 1    |
| C101-C114                         | 17-5SR101J    | 17-5SR101J    | CAP. E.P.S., 100pF/50V, +/-5% | 14   |
| SWITCHES                          |               |               |                               |      |
| tone DEFEAT & MONO                | 31-1209       | 31-1209       | SW-SEL SPUN21K006-EK          | 1    |
| PH/TU/VI/CD/TA2                   | 31-1210       | 31-1210       | SW-SEL SPUN51K004-EK          | 1    |
| SW301                             | 31-1211       | 31-1211       | SW-PUSH SPUN12K801-EK MONITOR | 1    |
| PHONO CKT                         |               | (19-1206-2)   | NAD-106                       | 1    |
| PHONO                             | 12-2123-1     | 12-2123-1     | RCA JACK, 2P/G GOLD PLATE     | 1    |
| RESISTORS                         |               |               |                               |      |
| R235, R236                        | 16-1/4MA101F  | 16-1/4MA101F  | RES. M.F., 100, 1/4W, +/-1%   | 2    |
| R217, R218                        | 16-1/4MA102F  | 16-1/4MA102F  | RES. M.F., 1K, 1/4W, +/-1%    | 2    |
| R233, R234, R237-242              | 16-1/4MA103F  | 16-1/4MA103F  | RES. M.F., 10K, 1/4W, +/-1%   | 8    |
| R227, R228                        | 16-1/4MA113F  | 16-1/4MA113F  | RES. M.F., 11K, 1/4W, +/-1%   | 2    |
| R209, R210                        | 16-1/4MA121F  | 16-1/4MA121F  | RES. M.F., 120, 1/4W, +/-1%   | 2    |
| R223, R224                        | 16-1/4MA1333F | 16-1/4MA1333F | RES. M.F., 133K, 1/4W, +/-1%  | 2    |
| R225, R226                        | 16-1/4MA150F  | 16-1/4MA150F  | RES. M.F., 15, 1/4W, +/-1%    | 2    |
| R212, R211                        | 16-1/4MA180F  | 16-1/4MA180F  | RES. M.F., 18, 1/4W, +/-1%    | 4    |
| R221, R222, R229, R230            | 16-1/4MA221F  | 16-1/4MA221F  | RES. M.F., 220, 1/4W, +/-1%   | 2    |
| R215, R216                        | 16-1/4MA222F  | 16-1/4MA222F  | RES. M.F., 2K2, 1/4W, +/-1%   | 2    |
| R201, R202 * AH                   | 16-1/4MA332F  | 16-1/4MA332F  | RES. M.F., 3K3, 1/4W, +/-1%   | 2    |
| R201, R202 * C                    | 16-1/4MA222F  | 16-1/4MA222F  | RES. M.F., 2K2, 1/4W, +/-1%   | 2    |
| R205, R206                        | 16-1/4MA334F  | 16-1/4MA334F  | RES. M.F., 330K, 1/4W, +/-1%  | 2    |
| R203, R204 * AH                   | 16-1/4MA472F  | 16-1/4MA472F  | RES. M.F., 4K7, 1/4W, +/-1%   | 2    |
| R203, R204 * C                    | 16-1/4MA103F  | 16-1/4MA103F  | RES. M.F., 10K, 1/4W, +/-1%   | 2    |
| R219, R220                        | 16-1/4MA472F  | 16-1/4MA472F  | RES. M.F., 4K7, 1/4W, +/-1%   | 2    |
| R207, R208                        | 16-1/4MA563F  | 16-1/4MA563F  | RES. M.F., 56K, 1/4W, +/-1%   | 2    |
| R231, R232                        | 16-1/4MA680F  | 16-1/4MA680F  | RES. M.F., 68, 1/4W, +/-1%    | 2    |
| R213, R214, R243, R244            | 16-1/4MA681F  | 16-1/4MA681F  | RES. M.F., 680, 1/4W, +/-1%   | 4    |
| CAPACITORS                        |               |               |                               |      |
| C215, C216                        | 17-0.63ER228M | 17-0.63ER228M | CAP. ELE., 2200uF/6V3, +/-20% | 2    |
| C223, C224                        | 17-2.5ER106M  | 17-2.5ER106M  | CAP. ELE., 10uF/25V, +/-20%   | 2    |
| C231, C232                        | 17-2.5ER227M  | 17-2.5ER227M  | CAP. ELE., 220uF/25V, +/-20%  | 2    |
| C205, C206, C219, C220            | 17-2.5ER476M  | 17-2.5ER476M  | CAP. ELE., 47uF/25V, +/-20%   | 4    |
| C221, C222                        | 17-5DR150J    | 17-5DR150J    | CAP. M.CER., 15pF/50V, +/-5%  | 2    |
| C209, C210                        | 17-5DR560J    | 17-5DR560J    | CAP. M.CER., 56pF/50V, +/-5%  | 2    |
| C235-C238 * C                     | 17-5DR101J    | 17-5DR101J    | CAP. M.CER., 100pF/50V, +/-5% | 4    |
| C233, C234 * C                    | 17-5DR221J    | 17-5DR221J    | CAP. M.CER., 220pF/50V, +/-5% | 2    |
| C203, C204, C217, C218, C225-C228 | 17-5FR104J    | 17-5FR104J    | CAP. M.P.E., 0.1uF/50V, +/-5% | 8    |
| C229, C230                        | 17-5PR222J    | 17-5PR222J    | CAP. P.P., 2n2F/50V, +/-5%    | 2    |
| C211, C212                        | 17-5SR243J    | 17-5SR243J    | CAP. E.P.S., 24nF/50V, +/-1%  | 2    |
| C213, C214                        | 17-5SR682J    | 17-5SR682J    | CAP. E.P.S., 6n8F/50V, +/-1%  | 2    |
| C201, C202, C207, C208            | 17-5SR101J    | 17-5SR101J    | CAP. E.P.S., 100pF/50V, +/-5% | 4    |
| COILS                             |               |               |                               |      |
| L201, L202 * AH                   | 29-1089       | 29-1089       | COIL Troid coil, 22uH         | 2    |
| L203, L204 * AH                   | 29-1091       | 29-1091       | COIL Troid coil, 3.7mH        | 2    |
| L201-L204 * C                     | 29-1109       | 29-1109       | COIL Troid coil, 1mH          | 4    |
| DIODES                            |               |               |                               |      |
| D201-D204                         | 1N4148        | 30-1N4148     | DIODE DIODE 1N4148            | 4    |
| TRANSISTORS                       |               |               |                               |      |
| Q205-Q208                         | 2SA1015GR     | 30-2SA1015    | TR. 2SA1015GR, Toshiba        | 4    |
| Q201-Q204                         | 2SC3329BL     | 30-2SC3329    | TR. 2SC3329BL, Toshiba        | 4    |
| Q209-Q214                         | BC556         | 30-BC556      | TR. BC556, Philips            | 6    |
| SWITCH                            |               |               |                               |      |
| SW303                             | 31-1000S      | 31-1000S      | TOGGLE SW 8021 MM/MC          | 1    |
| PREAMP CKT                        |               | (19-1206-3)   | NAD-106                       | 1    |
| RESISTORS                         |               |               |                               |      |
| R319, R320, R351                  | 16-1/4MA102F  | 16-1/4MA102F  | RES. M.F., 1K, 1/4W, +/-1%    | 3    |
| R313, R314                        | 16-1/4MA153F  | 16-1/4MA153F  | RES. M.F., 15K, 1/4W, +/-1%   | 2    |
| R323, R324, R331, R332            | 16-1/4MA181F  | 16-1/4MA181F  | RES. M.F., 180, 1/4W, +/-1%   | 4    |
| R343, R344                        | 16-1/4MA221F  | 16-1/4MA221F  | RES. M.F., 220, 1/4W, +/-1%   | 2    |
| R301, R302                        | 16-1/4MA224F  | 16-1/4MA224F  | RES. M.F., 220K, 1/4W, +/-1%  | 2    |
| R321, R322                        | 16-1/4MA272F  | 16-1/4MA272F  | RES. M.F., 2K7, 1/4W, +/-1%   | 2    |
| R305, R306                        | 16-1/4MA391F  | 16-1/4MA391F  | RES. M.F., 390, 1/4W, +/-1%   | 2    |
| R307, R308, R327-R330             | 16-1/4MA392F  | 16-1/4MA392F  | RES. M.F., 3K9, 1/4W, +/-1%   | 6    |
| R315-R318                         | 16-1/4MA680F  | 16-1/4MA680F  | RES. M.F., 68, 1/4W, +/-1%    | 4    |



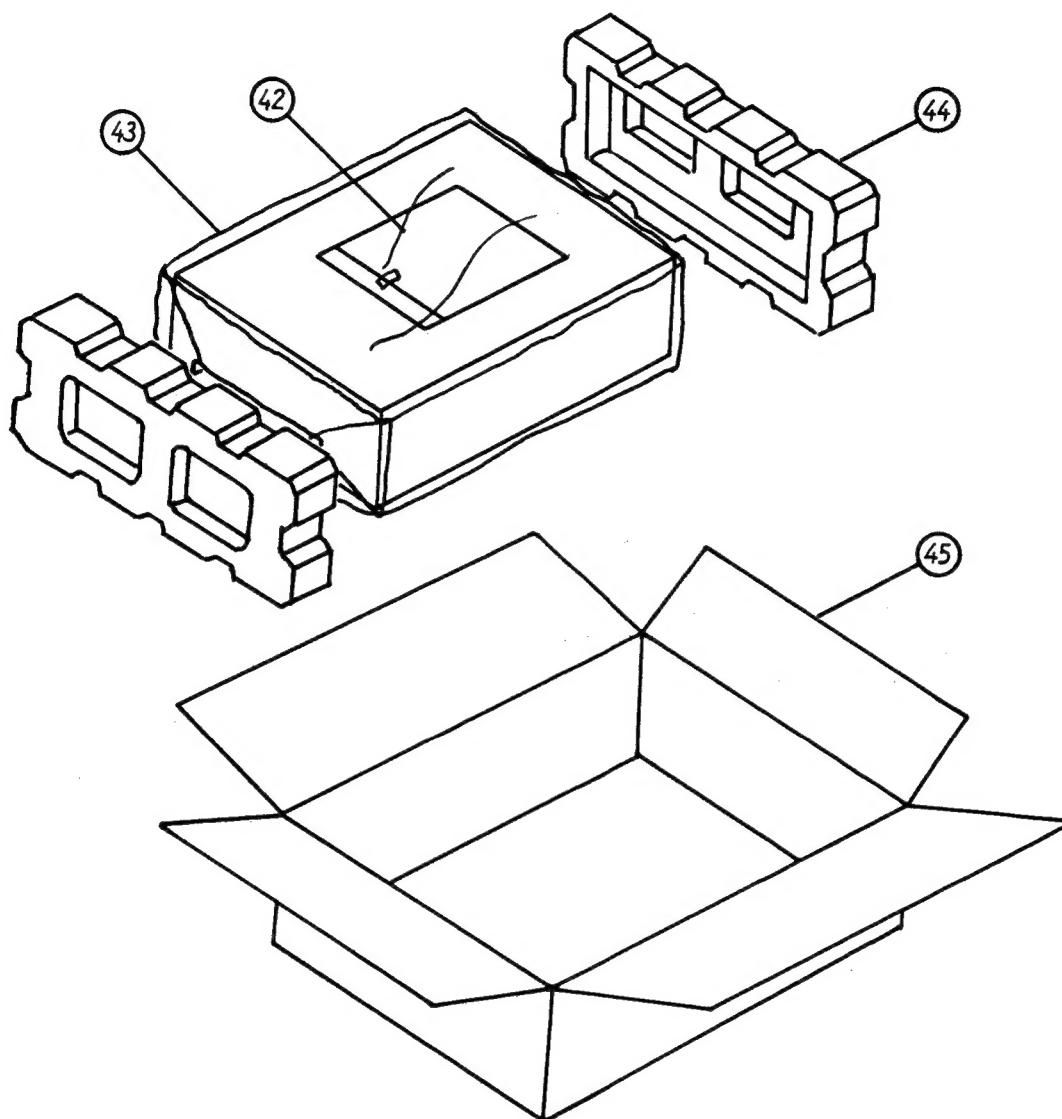
NAD-106 PARTS LIST

| LOCATION                           | REF. NO.      | PARTS NO.     | DESCRIPTION                            | Q'TY |
|------------------------------------|---------------|---------------|--|------|
| R325, R326, R333, R334             | 16-1/4MA681F  | 16-1/4MA681F  | RES. M.F., 680, 1/4W, +/-1%            | 4    |
| R335, R336                         | 16-1/4MA223F  | 16-1/4MA223F  | RES. M.F., 22K, 1/4W, +/-1%            | 2    |
| R309-R312                          | 16-1/4MA682F  | 16-1/4MA682F  | RES. M.F., 6K8, 1/4W, +/-1%            | 4    |
| R337-R342                          | 16-1/4MA470F  | 16-1/4MA470F  | RES. M.F., 47, 1/4W, +/-1%             | 6    |
| CAPACITORS                         |               |               |  |      |
| C317, C318                         | 17-2.5ER107ML | 17-2.5ER107ML | CAP. ELE., 100uF/25V, +/-20%, L.L.     | 2    |
| C313, C314                         | 17-2.5ER476ML | 17-2.5ER476ML | CAP. ELE., 47uF/25V, +/-20%, L.L.      | 2    |
| C323, C324                         | 17-3.5ER476ML | 17-3.5ER476ML | CAP. ELE., 47uF/35V, +/-20%, L.L.      | 2    |
| C309, C310                         | 17-5DR150J    | 17-5DR150J    | CAP. M.CER., 15pF/50V, +/-5%           | 2    |
| C311, C312, C315, C316, C321, C322 | 17-5FR104J    | 17-5FR104J    | CAP. M.PE., 0.1uF/50V, +/-5%           | 6    |
| C319, C320                         | 17-5FR183J    | 17-5FR183J    | CAP. M.PE., 18nF/50V, +/-5%            | 2    |
| C303, C304, C327, C328             | 17-5FR474J    | 17-5FR474J    | CAP. M.PE., 0.47uF/50V, +/-5%          | 4    |
| C325, C326                         | 17-5FR823J    | 17-5FR823J    | CAP. M.PE., 82nF/50V, +/-5%            | 2    |
| C329, C330                         | 17-5SR102J    | 17-5SR102J    | CAP. E.PS., 1nF/50V, +/-5%             | 2    |
| C305, C306                         | 17-5SR101J    | 17-5SR101J    | CAP. E.PS., 100pF/50V, +/-5%           | 2    |
| C307, C308                         | 17-5SR221J    | 17-5SR221J    | CAP. E.PS., 220pF/50V, +/-5%           | 2    |
| C351                               | 17-5SR820J    | 17-5SR820J    | CAP. E.PS., 82pF/50V, +/-5%            | 1    |
| VAR.                               |               |               |  |      |
| VR302                              | 29-4136       | 29-4136       | VAR. TREBLE RK163121A106-10KC*2-EK     | 1    |
| VR303                              | 29-4140       | 29-4140       | VAR. BASS RK163121A155-50KC*2-EK       | 1    |
| VR304                              | 29-4141       | 29-4141       | VAR. BAL RK163111E291-10KW-EK          | 1    |
| VR301                              | 29-4162       | 29-4162       | VAR. VOL RK27112A0-20Kax2              | 1    |
| DIODES                             |               |               |  |      |
| D301-D306                          | 1N4148        | 30-1N4148     | DIODE DIODE 1N4148                     | 6    |
| TRANSISTORS                        |               |               |  |      |
| Q307, Q308                         | 2SA1015GR     | 30-2SA1015    | TRAN. 2SA1015GR, Toshiba               | 2    |
| Q301, Q302                         | 2SA1316GR     | 30-2SA1316    | TRAN. 2SA1316GR, Toshiba               | 2    |
| Q303-Q306                          | 2SC1815GR     | 30-2SC1815    | TRAN. 2SC1815GR, Toshiba               | 4    |
| POWER CKT                          |               | (19-1206-5)   | NAD-106                                | 1    |
| RESISTORS                          |               |               |  |      |
| R501, R502                         | 16-1XK220J    | 16-1XK220J    | RES. M.X.22, 1W, +/-5%, KINK           | 2    |
| R513                               | 16-1/2CA332J  | 16-1/2CA332J  | RES. C.F., 3K3, 1/2W, +/-5%, TAPE      | 1    |
| R601                               | 16-1/4MA103F  | 16-1/4MA103F  | RES. M.F., 10K, 1/4W, +/-1%            | 1    |
| R503-R509                          | 16-1/4MA122F  | 16-1/4MA122F  | RES. M.F., 1K2, 1/4W, +/-1%            | 7    |
| R511, R512                         | 16-1/4MA153F  | 16-1/4MA153F  | RES. M.F., 15K, 1/4W, +/-1%            | 2    |
| R510                               | 16-1/4MA331F  | 16-1/4MA331F  | RES. M.F., 330, 1/4W, +/-1%            | 1    |
| R603                               | 16-1/4MA391F  | 16-1/4MA391F  | RES. M.F., 390, 1/4W, +/-1%            | 1    |
| R605                               | 16-1/4MA823F  | 16-1/4MA823F  | RES. M.F., 82K, 1/4W, +/-1%            | 1    |
| CAPACITORS                         |               |               |  |      |
| C502                               | 17-25FR103K   | 17-25FR103K   | CAP. M.PE., 10nF/250V, +/-10%          | 1    |
| C511                               | 17-3.5ER106M  | 17-3.5ER106M  | CAP. ELE., 10uF/35V, +/-20%            | 1    |
| C507, C508, C513, C514             | 17-3.5ER477M  | 17-3.5ER477M  | CAP. ELE., 470uF/35V, +/-20%           | 4    |
| C512                               | 17-3.5ER476M  | 17-3.5ER476M  | CAP. ELE., 47uF/35V, +/-20%            | 1    |
| C501                               | 17-40CR472M   | 17-40CR472M   | CAP. CER., 4n7F/400V, +/-20%           | 1    |
| C509, C510                         | 17-5DR220J    | 17-5DR220J    | CAP. M.CER., 22pF/50V, +/-5%           | 2    |
| C601, C602                         | 17-5ER476M    | 17-5ER476M    | CAP. ELE., 47uF/63V, +/-20%            | 2    |
| C505, C506                         | 17-5ER228M    | 17-5ER228M    | CAP. ELE., 2200uF/50V, +/-20%          | 2    |
| C503, C504, C515, C516             | 17-5FR473J    | 17-5FR473J    | CAP. M.PE., 47nF/50V, +/-5%            | 4    |
| DIODES                             |               |               |  |      |
| D501                               | 30-HZ22-2     | 30-HZ22-2     | ZENER DIODE ZD 22V 1/2W, +/-5%         | 1    |
| D601, D602                         | 1N4148        | 30-1N4148     | DIODE DIODE 1N4148                     | 2    |
| BD501                              | RB153         | 30-RB153      | BRIDGE DIODE RB153                     | 1    |
| TRANSISTORS                        |               |               |  |      |
| Q502                               | 2SB649A or C  | 30-2SB649A    | TRAN. 2SB649A or C, Hitachi            | 1    |
| Q501                               | 2SD669A or C  | 30-2SD669A    | TRAN. 2SD669A or C, Hitachi            | 1    |
| Q504                               | 2SA1015GR     | 30-2SA1015    | TRAN. 2SA1015GR, Toshiba               | 1    |
| Q503                               | 2SC1815GR     | 30-2SC1815    | TRAN. 2SC1815GR, Toshiba               | 1    |
| Q601                               | 2SC2240GR     | 30-2SC2240    | TRAN. 2SC2240GR, Toshiba               | 1    |
| FUSES                              |               |               |  |      |
| F01, F02                           | 32S2014       | 32S2014       | CLAMPER FUSE CLAMPER, CPF-011          | 4    |
| F1, F2 *C                          | 32S1250250TS  | 32S1250250TS  | 218.250 250mA/250V, 5x20mmT, SEMKO     | 2    |
| F1, F2 *B1                         | 32S1250250TS  | 32S1250250TS  | 218.250 250mA/250V, 5x20mmT, SEMKO     | 2    |
| F1, F2 *AH                         | 32S1250250TU  | 32S1250250TU  | SGC0.25 250mA/250V, 5x20mmT, SGC, UL   | 2    |
| T501                               | 29-2132       | 29-2132       | TRANSFORMER Universal/LX-0136          | 1    |
| S501                               | 31-1213       | 31-1213       | SW-POWER SDDL81007U-EK TV-3            | 1    |
| FOR LED                            |               | (19-1206-6)   | NAD-106                                | 1    |
| D502                               | 30-SE2021     | 30-SE2021     | L.E.D.IODE LED/SE2021, GRN             | 1    |
| HEADPHONE CKT                      |               | (19-1206-4)   | NAD-106                                | 1    |
| J401                               | 12-2128G      | 12-2128G      | HEADPHONE JACK CPJ-061-9G with clipper | 1    |

## NAD-106 PARTS LIST

| LOCATION                     | REF. NO.     | PARTS NO.    | DESCRIPTION                     | Q'TY |
|------------------------------|--------------|--------------|---------------------------------|------|
| <b>RESISTORS</b>             |              |              |                                 |      |
| R431                         | 16-1MK151J   | 16-1MK151J   | RES. M.F., 150, 1W, +/-5%, KINK | 1    |
| R432                         | 16-1MK820J   | 16-1MK820J   | RES. M.F., 82, 1W, +/-5%, KINK  | 1    |
| R413, R414                   | 16-1/2CA121J | 16-1/2CA121J | RES. C.F., 120, 1/2W, +/-5%     | 2    |
| R407, R408, R434             | 16-1/4MA102F | 16-1/4MA102F | RES. M.F., 1K, 1/4W, +/-1%      | 3    |
| R433                         | 16-1/4MA152F | 16-1/4MA152F | RES. M.F., 1K5, 1/4W, +/-1%     | 1    |
| R403, R404, R411, R412, R453 | 16-1/4MA223F | 16-1/4MA223F | RES. M.F., 22K, 1/4W, +/-1%     | 5    |
| R452                         | 16-1/4MA224F | 16-1/4MA224F | RES. M.F., 220K, 1/4W, +/-1%    | 1    |
| R405, R406                   | 16-1/4MA333F | 16-1/4MA333F | RES. M.F., 33K, 1/4W, +/-1%     | 2    |
| R409, R410, R435, R436       | 16-1/4MA472F | 16-1/4MA472F | RES. M.F., 4K7, 1/4W, +/-1%     | 4    |
| R451                         | 16-1/4MA474F | 16-1/4MA474F | RES. M.F., 470K, 1/4W, +/-1%    | 1    |
| R401, R402                   | 16-1/4MA682F | 16-1/4MA682F | RES. M.F., 6K8, 1/4W, +/-1%     | 2    |
| <b>CAPACITORS</b>            |              |              |                                 |      |
| C403, C404, C433, C434       | 17-2.5ER107M | 17-2.5ER107M | CAP. ELE., 100uF/25V, +/-20%    | 4    |
| C431, C432                   | 17-2.5ER476M | 17-2.5ER476M | CAP. ELE., 47uF/25V, +/-20%     | 2    |
| C407, C408                   | 17-5DR271J   | 17-5DR271J   | CAP. M.CER., 270pF/50V, +/-5%   | 2    |
| C401, C402                   | 17-5ER105M   | 17-5ER105M   | CAP. ELE., 1uF/50V, +/-20%      | 2    |
| C405, C406                   | 17-5FR222J   | 17-5FR222J   | CAP. M.PE., 2n2F/50V, +/-5%     | 2    |
| C409, C410                   | 17-5FR473J   | 17-5FR473J   | CAP. M.PE., 47nF/50V, +/-5%     | 2    |
| C411-C414 * C                | 17-5FR102J   | 17-5FR102J   | CAP. M.PE., 1nF/50V, +/-5%      | 4    |
| <b>RELAY</b>                 |              |              |                                 |      |
| K451                         | 29-1000S     | 29-1000S     | RELAY DS2Y-S-DC-24V             | 1    |
| <b>DIODE</b>                 |              |              |                                 |      |
| D451                         | 1N4148       | 30-1N4148    | DIODE 1N4148                    | 1    |
| <b>TRANSISTORS</b>           |              |              |                                 |      |
| Q451, Q452                   | 2SA1015GR    | 30-2SA1015   | TRAN. 2SA1015GR, Toshiba        | 2    |
| Q432                         | 2SA817Y      | 30-2SA817    | TRAN. 2SA817Y, Toshiba          | 1    |
| Q431                         | 2SC1627Y     | 30-2SC1627   | TRAN. 2SC1627Y, Toshiba         | 1    |
| Q401, Q402, Q453             | 2SC2878A     | 30-2SC2878   | TRAN. 2SC2878A, Toshiba         | 3    |
| <b>IC</b>                    |              |              |                                 |      |
| IC401                        | NJM2043(D)   | 30-NJM2043   | IC. NJM2043(D), JRC             | 1    |

# PACKING DIAGRAM



| ITEM | PARTS NO. | DESCRIPTION    | Q'TY |
|------|-----------|----------------|------|
| 42   | 21-4054   | OWNER'S MANUAL | 1    |
| 43   | 26-0716   | PE - BAG       | 1    |
| 44   | 34-1059   | POLYLON        | 2    |
| 45   | CT-5193-2 | GIFT - BOX     | 1    |